


## 610 20 AUTOMATIC DATA PROCESSING INSTALLATION (SF)

This code is intended for facilities which accommodate non-tactical Automated Data Processing (ADP) equipment and direct support functions. As a general rule, these are centralized computer installations such as the Navy Regional Data Automation Centers (NARDAC's) or equivalent. In contrast, spaces for small machines or intelligent terminals which are dedicated to support as discrete administrative or technical function, are included under the specific category code for that function.

The ADP spaces may be divided into three basic categories:

- Main computer(s)
- Primary support
- Secondary support

At smaller installations some or all of the space categories may be colocated in the same building, while at large installations, they are likely to be separated. In addition to the three basic categories, an ADP installation may require indirect support features which are planned and reported under their own category codes; these are identified later in the text.

## REQUIREMENTS COMPUTATION

ADP centers can be equipped with one or several computer systems, which are usually well defined. The facilities planner should use the equipment list of the existing or proposed systems for calculating space requirements. If the system has not been determined, select a system similar in capability and use its equipment inventory for calculations and requirements back-up data.

The terminology used to describe and identify ADP functional elements varies widely with equipment suppliers. These criteria attempt to standardize the terminology in order to simplify the facility requirement computation and review. When submitting requirements, subtotals must be shown for each functional group of spaces as shown below.

A separate calculation for each is required, even though co-location in a single building may be planned.

In general, requirements for spaces which primarily house equipment will be calculated by multiplying the actual square feet occupied by the equipment (footprint or shadow) by a factor which will allow for operation, circulation and maintenance. The footprint of a piece of equipment is the actual amount of floor space occupied. The shadow is the projection of the equipment outline on the floor which would encompass protrusions or overhangs from the sides of certain equipment such as printers. The space requirements for other areas will be determined on an individual basis.

Following is a discussion of the basic categories of ADP spaces. Space allowances are given in Table 610-20.

### Main Computer Area

This space accommodates the central processor, memory, controllers, on-line storage, on-line output devices, telecommunications interface equipment and other directly related equipment. Key sections of this area require raised floor and closely controlled HVAC system; these requirements are determined by individual analysis.

### Primary Support Area

This area accommodates functions and equipment which directly control or provide input to the main computer. The main components of this category are:

Tape, disc and card library. Area is for storage, cataloging and maintenance of library material. It does not require raised flooring, but should have the same environmental controls as the computer area.

Vaults may be required for security of data masters and classified material. Space calculations must show the volume of material to be stored with its related floor area requirement, space devoted to circulation, and space requirements for desks and work tables.

Data entry. Area for input devices such as readers for cards or tapes, drums, disks, optical character recognition, and similar equipment.

Electronic Accounting Machine (EAM). This equipment may not be used by all activities.

Terminal control room. This space is for all equipment related to the operation of terminals, data sets, testing and communications switching.

#### Secondary Support Area.

The main components are:

Field engineering. Work area required for the equipment vendors' use. It must be securable.

Production control. This space accommodates internal management, scheduling operations and customer relations. Requires provisions for visitors' conferences and display boards.

Work reception. This is a buffer zone designated for customers to deliver and receive their work. It should be adjacent to the building entrance and production control. Security screening may be required in this area.

Output preparation. Computer output products are processed in this area. It houses PCAM equipment, bursters, paper shredders, decollators, reproduction machines and assembly tables.

Break room. This space is required for personnel who work in environmentally controlled areas where smoking, food or beverage consumption are not permitted.

Utilities support. This space accommodates equipment which directly serve the ADP areas such as fire alarms, smoke detection system, temperature and humidity controls, no-break power sources, and power quality regulators. Derive space requirements by using an industrial engineering layout.

DPI Administration. This component is dedicated to administrative type personnel who need to be immediately contiguous to the ADP spaces. Such functions include: direct supervision of the DPI, monitoring equipment performance, DPI security, environmental monitoring, software and hardware, teleprocessing troubleshooting and repair.

Table 610-20 provides space allowances or other planning guidance to calculate facility requirements for the above components.

TABLE 610-20  
Space Allowances for Automatic Data Processing Centers

TYPE OF SPACE	ALLOWANCE IN NET SF	NOTES
1. <u>MAIN COMPUTER AREA</u>	5 x Footprint or Shadow of Equipment	1
2. <u>PRIMARY SUPPORT AREA</u>		
Tape/Disc/Card Library	Individual Computation (See Text)	
Data Entry	5 x Footprint or Shadow of Equipment	
Electric Accounting Machine	5 x Footprint or Shadow of Equipment	
Terminal Control Room	5 x Footprint or Shadow of Equipment	
3. <u>SECONDARY SUPPORT AREA</u>		
Field Engineering	225 NSF per Workbench	2
Production Control	100 NSF per Person	
Work Reception	90 NSF per Person	3
Output Preparation	3 x Footprint or Shadow of Equipment	4
Break Room		
Utilities Support	Industrial Engineering Analysis	
DPI Administration	Use Code 610-10 Detailed Criteria	
<u>NOTES</u>  1. Includes footprints of floor mounted A/C equipment. 2. Add space for parts storage (individual justification required). 3. Add space for counter and storage for customers' work. 4. Add space for work surfaces (individual justification required).  <u>NET TO GROSS CONVERSION</u> The allowance for items 1 through 3 of table 610-20 are given in net square feet. To obtain gross square feet, multiply allowance total by the factor of 1.3.		

An activity whose primary mission is to operate a data processing installation may have other considerations for facilities not in direct support of the DPI operations such as:

General activity administration spaces  
Training administration  
Programming support  
System software development  
Conference rooms  
Technical library

These facilities are to be planned using code 610-10 criteria as well as reported under 610-10 category code. Bulk administration storage is to be planned and reported under category code 610-77.

Most ADP facilities have a mission requirement for training of their own personnel as well as customer representatives in system operation and application to their particular needs. For this task there may be a requirement for classrooms that are planned using category code 171-10 or 171-20 criteria.